## **Designer Notes for January 1, 2014 Recurring Special Provisions**

(Updated for April 25, 2014 and June 13, 2014 lettings.)

- 1. Designer Note: This check sheet is required in all contracts that involve Federal funds.
- 2. Designer Note: This check sheet is required in <u>all</u> Federal contracts.
- 3. Designer Note: This check sheet is required in all contracts.
- 4. Designer Note: This check sheet is required in all contracts involving State funds only.
- 5. Designer Note: This check sheet is required in all contracts involving State funds only.
- 6. Designer Note: Include in all contracts where Asbestos Bearing Pad Removal is part of the structure work.
- 7. Designer Note: Include in all contracts where the existing bridge deck HMA surface is to be removed and the waterproofing membrane contains asbestos and will be removed. The designer must have in the project files a completed "Asbestos Determination Certificate" for every bridge within the project limits. The District Bridge Maintenance Engineer and/or the District Hydraulics Engineer can provide copies of these certificates. If your project has any bridge deck containing asbestos, insert this special provision as well as the General Notes entitled "Asbestos Bridge Wearing Surface Removal".
- 8. Designer Note: This check sheet will be required for those contracts that will involve Contractor work on haul road stream crossings, other temporary stream crossings, and in stream work pads. Contracts that would generally involve this type of work would be bridges/structures, new or rebuilt, and contracts involving earth excavation, embankment or borrow excavation. Discuss these types of work operations and any other stream related work with your Project Engineer. Any in-stream crossing or other work will require an individual 404 permit from the Corps of Engineers. Be sure to let the Hydraulics Engineer (Jim Miller) know as soon as possible that a Corps permit will be needed. The permit has a lead-time and is required for the project to proceed to letting.
- 9. Designer Note: (See #10 below.) Depending on IDOT manpower, this check sheet will be included as a pay item when the Contractor will be required to do all contract staking, except bridges. A large span culvert measuring more than 6 meters (20 feet) along the survey line will require a structure number be assigned to the structure. This will require that the Designer, if he is calling for Contractor staking, use the check sheet entitled Construction Layout Stakes and not the check sheet entitled Construction Layout Stakes Except for Structures. Discuss with the Bureau of Project Implementation (Construction) as to what manpower sources are available.
- 10. Designer Note: Depending on IDOT manpower needs, this check sheet will be included as a pay item when the Contractor will be required to do <u>all contract staking</u>, <u>including bridges</u>. This check sheet should be used for a large box culvert or a multi pipe that will require a structure number. This would be a structure that will have a span length along survey line of more than 6 meters (20 feet).

Discuss this check sheet with the Bureau of Project Implementation (Construction) as to what manpower sources are available.

11. Designer Note: This special provision specifies the requirements for geotextile fabric for use on railroad crossings.

Include <u>only</u> on projects where the railroad crossing is a contract pay item. Also may be required for temporary crossings.

Railroad crossings are generally (99%) handled by the Railroad through an agreement and not part of our contract. If in doubt as to how to handle, discuss with Project Support.

12. Designer Note: Use this check sheet where existing pavement is being reconstructed and voids are evident under the existing pavement that can be filled by grouting. Discuss with Maintenance Field Engineer responsible for the area.

NOTE: A detail of the slab movement detection device is included in CADD and this drawing must be included in your contract plans.

- 13. Designer Note: This check sheet will be required on a contract where cold milling is required but where the cold milled area will not be overlaid. Include CADD Standard 440001 in your plans. If your contract is to be cold milled and the area overlaid, you should use one of the two District special provisions on this subject, **not** this check sheet.
- 14. Designer Note: This check sheet requires that once a lift of bituminous resurfacing is placed on a lane of pavement, any adjoining bituminous shoulder shall be resurfaced with an equal thickness before any other lane is resurfaced for each lift of resurfacing. Insert this special on resurfacing projects which meet the following criteria: All four lane interstates and freeways, all four lane expressways, four lane highways with ADT > 25,000 or peak one-way VPH > 1700, two lane highways with ADT > 10,000 or peak one-way VPH > 800.
- 15. Designer Note: Do not use this check sheet. It has been superseded by the Bureau of Design & Environment (BD&E) special provision of the same name.
- 16. Designer Note: Intended to remove thick bituminous overlay so that the original pavement can be examined and then patched, if necessary. It also further defines specific pay items for work involved.
- 17. Designer Note: This check sheet was developed by Materials and Physical Research as an alternate to replacing Preformed Joint Sealer and Neoprene Expansion Joints up to 65 mm (2 ½ inches). Include with any projects that have POLYMER CONCRETE as a pay item.

- 18. Designer Note: This rehabilitation process can be used in a variety of gravity applications such as trenchless rehabilitation of sanitary sewers, storm sewers, and process piping. Insert this special provision if trenchless repair of the items listed above is selected. Prior to selection consult your Project Engineer. Additional information such as size of pipe to be lined, number of laterals, and manhole treatment may be necessary.
- 19. Designer Note: This check sheet calls for CA 16 for backfill and wrapping the trench. Discuss usage with Implementation.
- 20. Designer Note: This check sheet was developed by the Central Bureau of Traffic and should be incorporated into all plans containing guardrail, barrier wall or bridge rail. The designer is required to specify the color of all reflectors to be placed and to provide appropriate traffic control standards for the installation of reflectors/markers. It is the District's option to select the type of reflector marker for use on guardrail and barrier walls, and the type of terminal marker for guardrail. This option should be specified by the pay item used. The District prefers use of the top mounted reflector Type C on barrier walls. Include Highway Standards 635006 and 635011 in the plans if this Check Sheet is used.
- 21. Designer Note: This check sheet was developed to obtain the desired pipe coating on bike racks. Use on all projects with bike racks.
- 22. Designer Note: This special provision covers the installation of temporary glare screens on temporary concrete barrier. Glare screens may be needed on temporary concrete barriers separating opposing lanes of traffic, especially on horizontal and vertical curves where oncoming headlight glare could be a problem. Discuss usage with your project engineer.
- 23. Designer Note: This special provision is for use on bridge contracts where staging is required and the District wants the contractor to have an option to post-mounting the temporary bridge and traffic signals. Discuss use with the District Traffic Control Technician.
- 24. Designer Note: Intended for use on all freeway/expressway contracts with lane closures as shown on Highway Standard 701400. It may also be used at the District's discretion on high visibility projects and/or projects that will require several months to complete.
- 25. Designer Note: This check sheet should be included for all projects containing roadway lighting. The designer should also include CADD Standard 701301-D4 in the plans.
- 26. Designer Note: This check sheet was developed to address difficulties with obtaining metric sized bolts. Include in all metric projects, which contain or could contain any type of bolted connection.
- 27. Designer Note: This check sheet was developed to address difficulties with obtaining metric sized reinforcement bars. Include in all metric projects containing reinforcement bars.

- 28. Designer Note: This special provision not to be used in District Four. Not recommended for use on recently constructed pavements or bridge decks. This is not recommended when there is steel in the patches due to the corrosion the calcium chloride causes.
- 29. Designer Note: Insert into contracts where a PCC inlay or overlay is selected. This method is for locations where excessive rutting has become a problem. Discuss with the Project Engineer, Operations, and Implementation before using. Also, refer to BDE Manual, Chapter 53 before using.
- 30. Designer Note: Do not use Check Sheet #30 unless requested by Materials.
- 31. Designer Note: Use in all contracts involving cast-in-place concrete.
- 32. Designer Note: This special allows the use of digital terrain modeling for field measurements of earthwork. This is to be used at the district's discretion. Discuss it with your Project Engineer and Construction.
- 33. Designer Notes: Insert at the district's discretion. Discuss with Construction. This special will not allow grinders to be used. When it is possible that Temporary Pavement Markings will be required over the winter and performed plastic pavement markings will be installed the next season; this may not be feasible since removing the temporary will require grinding.
- 34. Designer Note: Insert this special into contracts using an A-1 bituminous surface treatment. Use of this special provision shall be according to the Bureau of Design and Environment Manual, Chapter 52.

The designer must specify the gradation for the bituminous surface treatment on the plans. Districts are encouraged to use the CA 20 gradation as it has proven to perform well for A-1 surface treatments.

Include Special Provision on Temporary Flexible Raised Pavement Marker with this work.

Include the following information in the Traffic Control Plan Special Provision:

- Contractor shall post the roadway with "LOOSE GRAVEL" and SPEED LIMIT 35" signs in accordance with applicable articles of Division 700 of the Standard Specifications.
- These signs shall be placed at the start of the work, near intersecting roadways and then at an average spacing of 0.5 mi (0.8 km).
- The signs may be removed as soon as the sweeping operation has been completed.

35. Designer Note: Insert into all contracts using cape seal. Use of this special provision shall be according to the Bureau of Design and Environment Manual, Chapter 52.

Districts are encouraged to use the CA 20 gradation as it has proven to perform well for A-1 surface treatments.

The designer must specify the aggregate gradation for the A-1 bituminous surface treatment. Districts are encouraged to use the CA 20 gradation as it has proven to perform well for A-1 surface treatments.

The designer must specify the proper friction aggregate for the micro-surfacing layer on the plans using the following note:

"The aggregates for the micro-surfacing shall meet the friction aggregate requirements for Mixture \_\_ in Article 1004.03(a)."

Insert either "C" or "D" into the note to indicate which mixture is to be used according to the ADT volume on the project. ADT  $\leq$  5,000 shall use Mixture C and ADT > 5,000 shall use Mixture D.

Include the following information in the Traffic Control Plan Special Provision:

Contractor shall post the roadway with "LOOSE GRAVEL" and SPEED LIMIT 35" signs in accordance with applicable articles of Division 700 of the Standard Specifications. These signs shall be placed at the start of the work, near intersecting roadways and then at an average spacing of 0.5 mi (0.8 km). The signs may be removed as soon as the sweeping operation has been completed.

Include Special Provision on Temporary Flexible Raised Pavement Marker with this work.

36. Designer Note: Insert into all contracts using micro-surfacing. Use of this special provision shall be according to the Bureau of Design and Environment Manual, Chapter 52.

The designer must specify the friction aggregate mixture and the following information on the plans using the following note:

"The aggregates for the surface lift of micro-surfacing shall meet the friction aggregate requirements for Mixture in Article 1004.03(a)."

Insert either "C" or "D" into the note to indicate which mixture is to be used according to the ADT volume on the project. ADT  $\leq$  5,000 shall use Mixture C, and ADT > 5,000 shall use Mixture D.

37. Designer Note: Insert into all contracts using slurry seal. Use of this special provision shall be according to the Bureau of Design and Environment Manual, Chapter 52.

The designer must include the following note on the plans.

"Aggregates for the slurry seal shall meet the friction aggregate requirements for Mixture C."

38.	Designer Note: I	Insert into preventative	maintenance	contracts	using cape	seals or
	bituminous surfa					

39.	Design Note:	Insert into c	ontracts usir	ıg high-densi	ty expand	ling pol	yurethane	foam o
	restoring the e	levation of	settled bridge	e approach p	avements			